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| APPLICATION NO.   | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 10/626,999  | 07/25/2003  | Lai Meng Cheng       | MXIC-P910220        | 3721             |
| 7590 03/30/2006   |             |                      | EXAMINER            |                  |
| Kenton R. Mullins<br>Stout, Uxa, Buyan & Mullins, LLP<br>Suite 300<br>4 Venture<br>Irvine, CA 92618 |             |                      | AMSBURY, WAYNE P    |                  |
|   |             |                      | ART UNIT            | PAPER NUMBER     |
|   |             |                      | 2161                |                  |
| DATE MAILED: 03/30/2006   |             |                      |                     |                  |

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

10/626,999

**Applicant(s)**

CHENG ET AL.

**Examiner**

Wayne Amsbury

**Art Unit**

2161

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 25 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

**CLAIMS 1-24 ARE PENDING**

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

**Claims 1-3 and 21-22 are rejected under 35 U.S.C. 102(e) as being anticipated by Ankutse et al (Ankutse), US 6,727,106, 27 April 2004.**

Ankutse is directed to statistical process control that applies a process control strategy (PCS) to monitor and control for semi-conductor manufacturing that sends SPC data to a chart client for viewing [ABSTRACT; COL 2 lines 5-27].

As to **claim 1**:

*A method for creating a new control chart, the method comprising:*

Ankutse creates SPC charts as a component of decision support [COL 3 line 66 to COL 4 line 16] for statistical process control (SPC).

*providing a database including a plurality of SPC control charts and a plurality of tables;*

Ankutse includes a chart navigation feature that may be used to locate and group charts for display [FIG 12; COL 12 line 66 to COL 13 line 26].

The location feature includes a list of charts [COL 13 lines 4-6]. The database schema of Ankutse is a structure of related tables [FIG 19; COL 18 lines 27-55].

*determining that information stored in at least one of the plurality of tables has changed;*

*updating the at least one of the plurality of SPC control charts with the changed information, if the changed information can be described by at least one of the plurality of SPC control charts; and*

The system framework is that data is received from ongoing processes, essentially in real-time. This implies that data in the tables changes and this is recognized in order to associate a time stamp with each data point [COL 6 lines 58 and after]. The system updates data for a chart client [FIG 4 450; COL 7 lines 17-20], which also implies that a change in data associated with an SPC chart is recognized.

*creating a new control chart that can describe the changed information, if the changed information cannot be described by at least one of the plurality of SPC control charts.*

Ankutse provides for users to perform "what if" analyses on SPC charts [COL 4 lines 6-16; COL 16 lines 6-33]. A user may change the input data to the chart client as described beginning at COL 16 line 34. This includes changes of groupings and/or ordering of the data [COL 16 line 61 and after], which clearly requires not only changing and re-arranging the data, but detecting the changes in order to generate the corresponding graphs.

As to **claim 2**, the "what-if" feature determines whether or not information can be described by one of the SPC charts. The production server that produces charts for viewing at a PC is a server [COL 12 lines 55-65], and generally is embodied on a three-tiered system including a server and database as a basic record system [COL 21 lines 46-63].

The elements of **claims 21 and 22** are rejected in the analysis above and these claims are rejected on that basis.

As to **claim 3**, the chart client can identify key graph points including abnormal elements of the chart and detect "out of control" points, which corresponds to detection of abnormal process trends [COL 17 lines 40-59].

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to

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consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

**Claims 4, 14 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ankutse et al (Ankutse), US 6,727,106, 27 April 2004 and La et al (La), US 5,761,064, 2 June 1998.**

Ankutse does not address some of the specifics of these claims, such as table types. La is directed to automating a defect management system in the same application area as Ankutse, and in particular to automating it [La COL 2 line 18 and after], as set forth in **claim 23**. As noted by La, **it would have been obvious to one of ordinary skill** in the art to automate the analysis of using analytical results in order to avoid a variety of inefficiencies associated with human handling [La COL 2 lines 6-17]. This provides one motivation for applying the techniques of La to the system of Ankutse.

As to **claim 4**, Ankutse does not explicitly address various types of tables, but they were well known in the art at the time of the invention, as taught by La [COL 2 lines 43-54]. Routes, tools, recipes, specifications and measures are all components of chart analysis and well known to one of ordinary skill as means of efficient organization of a complex system. Verifying the format of a chart is inherent at various stages of use and display of it.

As to **claim 14**, iteration was a well-known technique at the time of the invention, and obvious for one of ordinary skill to apply when there are multiple changes that can occur in sequence, as in both the systems of Ankutse and La.

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3. **Claims 5-13, 15-20 and 24** are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

These claims include the limitation of determining that a chart is a new trend chart, which as set forth on page 11 lines 4-12 of the Specification, involves determining that the chart has not been previously used on the needed tools. These claims are neither anticipated nor suggested by the prior art of record.

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Wayne Amsbury whose telephone number is 571-272-4015. The examiner can normally be reached on M-F 6-18:30 FIRST WEEK.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Safet Metjahic can be reached on 571-272-4023. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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WPA

  
WAYNE AMSBURY  
PRIMARY PATENT EXAMINER